



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-1020; Directorate Identifier 2013-SW-078-AD]

RIN 2120-AA64

**Airworthiness Directives; Sikorsky Aircraft Corporation (Type Certificate
Previously held by Schweizer Aircraft Corporation) Helicopters**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Sikorsky Aircraft Corporation (type certificate previously held by Schweizer Aircraft) (Sikorsky) Model 269D and Model 269D Configuration A helicopters. This proposed AD would require reducing the life limit of the ring gear carrier assembly. This proposed AD is prompted by cracks in the ring gear carrier assembly. The proposed actions are intended to reduce the life of the ring gear carrier assembly to prevent failure of the main rotor transmission, loss of engine power to the main rotor, and subsequent loss of control of the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact Sikorsky Aircraft Corporation, Customer Service Engineering, 124 Quarry Road, Trumbull, CT 06611; telephone 1-800-Winged-S or 203-416-4299; email sikorskywcs@sikorsky.com. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Norman Perenson, Aviation Safety Engineer, New York Aircraft Certification Office, Propulsion & Services Branch, FAA, 1600 Stewart Ave., Westbury, New York; telephone (516) 228-7337; email Norman.Perenson@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

We propose to adopt a new AD for Sikorsky Model 269D and Model 269D Configuration A helicopters with a certain part-numbered ring carrier assembly installed. This proposed AD would require reducing the life limit of the ring carrier assembly from 6,000 hours time-in-service (TIS) to 5,000 hours TIS by revising the Airworthiness Limitations Section of the applicable maintenance manual and by removing from service any ring carrier assembly that exceeded the new life limit. This proposed AD is prompted

by the discovery of a crack in the ring gear carrier assembly discovered during unscheduled maintenance after black discoloration of the main transmission oil was observed. The crack extended around the entire circumference of the flange and intersected some of the bolt holes but did not propagate “bolt hole to bolt hole.” A metallurgical evaluation determined that fretting caused multiple origin fatigue cracking on the ring gear carrier assembly. The proposed actions to reduce the life of the ring gear carrier assembly are intended to prevent failure of the main rotor transmission, loss of engine power to the main rotor, and subsequent loss of control of the helicopter.

FAA’s Determination

We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition exists and is likely to exist or develop on other helicopters of the same type design.

Related Service Information

Sikorsky issued 269D Helicopter Alert Service Bulletin No. ASB DB-040A, Revision A, dated December 4, 2012, to implement a reduction in service life of the ring gear carrier assembly, part number (P/N) 269A5194, from 6,000 flight hours to 5,000 flight hours.

Proposed AD Requirements

This proposed AD would require reducing the life limit of the ring gear carrier assembly, P/N 269A5194, from 6,000 hours TIS to 5,000 hours TIS by revising the Airworthiness Limitations section of the applicable maintenance manual. This proposed AD would also require replacing each ring gear carrier assembly with an airworthy ring gear carrier assembly on or before reaching 5,000 hours TIS.

Costs of Compliance

We estimate that this proposed AD would affect 16 helicopters of U.S. Registry.

We estimate a minimal cost to change the life limit of the ring gear. If required, we estimate it would take 27.5 hours to replace a ring gear carrier assembly at \$85 per work hour. Required parts would cost \$7,591 for a total of \$9,929 per helicopter.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Amend § 39.13 by adding the following new airworthiness directive (AD):

Sikorsky Aircraft Corporation (Type Certificate Previously Held By Schweizer Aircraft Corporation): Docket No. FAA-2014-1020; Directorate Identifier 2013-SW-078-AD.

(a) Applicability

This AD applies to Sikorsky Aircraft Corporation Model 269D and Model 269D Configuration A helicopters with ring gear carrier assembly, part number (P/N) 269A5194, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a fatigue crack in a ring gear carrier assembly. This condition could result in failure of the main rotor transmission, loss of engine power to the main rotor, and subsequent loss of control of the helicopter.

(c) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

Before further flight:

(1) Revise the Airworthiness Limitations Section of the applicable maintenance manual by reducing the life limit of the ring gear carrier assembly, P/N 269A5194, from 6,000 hours time-in-service (TIS) to 5,000 hours TIS.

(2) Remove from service any ring gear carrier assembly, P/N 269A5194, with 5,000 or more hours TIS.

(f) Alternative Methods of Compliance (AMOC)

(1) The Manager, New York Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Norman Perenson, Aviation Safety Engineer, New York Aircraft Certification Office, Propulsion & Services Branch, FAA, 1600 Stewart Ave., Westbury, New York; telephone (516) 228-7337; email Norman.Perenson@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

Sikorsky 269D Helicopter Alert Service Bulletin No. ASB DB-040A, Revision A, dated December 4, 2012, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Sikorsky Aircraft Corporation, Customer Service Engineering, 124 Quarry Road, Trumbull, CT 06611; telephone 1-800-Winged-S or 203-416-4299; email sikorskywcs@sikorsky.com. You may review a copy of information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6300 Main Rotor Drive System.
Issued in Fort Worth, Texas, on December 8, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-29260 Filed 12/12/2014 at 8:45 am; Publication Date: 12/15/2014]